NEW UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 CFR 1.53(b))	DOCKET NO: UCA110005000 Total Pages in this Submission: 43

Priority

20. ☐ Priority - 35 USC 119
    - ☐ Priority of application serial no. _____ filed on _____ in _____ is claimed under 35 USC 119.
    - ☐ The certified copy has been filed in prior U.S. application Serial No. _____ on _____.
    - ☐ The certified copy will follow.

21. ☒ Priority - 35 USC 120
    - ☒ Amend the specification by inserting before the first line the following sentence:
      "This is a
      - ☒ continuation
      - ☐ divisional

      of ~~copending~~ application(s) now U.S. Pat. No. 6,395,220
      - ☒ Serial Number 09/432,328 Filed: November 2, 1999."
      - ☐ International Application No. _____ and which designated the U.S."

Inventorship Statement

22. ☒ Inventorship

With respect to the prior copending U.S. application from which this application claims benefit under 35 USC 120, the inventor(s) in this application is (are)

- ☐ the same.
- ☐ less than those named in the prior application and it is requested that the following inventor(s) identified above for the prior application be deleted:

_____

Carbon Fiber Binder Pitch

Background Of The Invention

1. Field of the Invention

This invention relates to a composition for and method of making a binder pitch for manufacturing carbon bodies having a substantially homogenous distribution of randomly oriented carbon fibers. The resultant graphite bodies made using the novel binder pitch of the present invention have a desirably lower transverse and longitudinal coefficient of thermal expansion than conventionally made graphite bodies.

2. Description of Related Art

The use of carbon fibers as a filler with pitch as a binder is well known in the art in manufacturing carbon bodies, e.g., graphite electrodes, having a reduced coefficient of thermal expansion (CTE). Typically, carbon bodies having a low CTE are made by admixing an oriented needle-like coke with a thermoplastic carbonizing binder, such as coal tar pitch, extruding or molding the resulting mixture into a desired shape then carbonizing and graphitizing the body. Although the carbon bodies produced in this manner have a low CTE, means for further reducing the CTE are constantly sought to improve the performance of these articles in the high temperature surroundings in which they are employed.

British Patent No. 1,526,809 to Singer et al. discloses an extruded carbon article prepared using 50% to 80% of oriented fibers made from mesophase pitch and 20% to 50% of a thermoplastic carbonizable binder. The resulting carbon article had a reduced longitudinal (with-grain) coefficient of thermal expansion.

U.S. Patent No. 4,998,709 to Griffin et al. discloses a method of making graphite electrode nipples using carbon fibers derived from mesophase pitch added to blends of coke and pitch to produce an electrode pinstock. The invention adds from 8 to 20% of mesophase pitch based carbon fibers to 65% premium coke and 22 to 28% of a binder to form an extrusion blend and extruding to form a pinstock